

WHAT IS CLAIMED IS:

1. A vehicle damper disk assembly damper mechanism comprising:

a first rotating member;

a second rotating member being disposed relatively rotatable to said first rotating

5 member; and

a plate member extending in a rotational direction having main surfaces facing in the radial directions, said plate member being configured to be pushed by said first rotating member in said rotational direction to slide against said second rotating member and to generate friction resistance during relative rotation of said first and second rotating members.

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2. The damper mechanism according to claim 1, wherein said plate member is

held by said second rotating member such that said plate member is movable in said rotational direction when said first rotating member pushes said plate member.

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3. The damper mechanism according to claim 2, wherein said plate member is

held by said second rotating member such that said plate member is elastically deformed.

4. The damper mechanism according to claim 3, wherein said second rotating

20 member includes a holding portion having a groove extending in the rotational direction and having opposite openings in the rotational direction,

said plate member is disposed in said groove having a rotational direction length longer than that of said groove,

said first rotating member has a pair of contact portions disposed on each rotational direction side of said holding portion, said contact portions is configured to contact ends of said plate member.

5        5.        The damper mechanism according to claim 4, wherein a rotational direction length between said pair of contact portions is longer than a rotational direction length of said plate member, so that a rotational direction gap is secured at least between one of ends of said plate member and one of said contact portions.

10       6.        The damper mechanism according to claim 5, further comprising an elastic member being compressed in the rotational direction when said first and second rotating member rotate relative to each other.

15       7.        The damper mechanism according to claim 1, wherein said plate member is held by said second rotating member such that said plate member is elastically deformed.

8.        The damper mechanism according to claim 1, wherein said second rotating member includes a holding portion having a groove extending in the rotational direction and having opposite openings in the rotational direction,

20        said plate member is disposed in said groove having a rotational direction length longer than that of said groove,

said first rotating member has a pair of contact portions disposed on each rotational direction side of said holding portion, said contact portions is configured to contact ends of said plate member.

9. The damper mechanism according to claim 1, further comprising an elastic member being compressed in the rotational direction when said first and second rotating member rotate relative to each other.

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10. A damper disk assembly for transmitting torque in a vehicle comprising:  
a hub;

a disk-like rotating member being disposed relatively rotatable to said hub;

an elastic connection mechanism elastically said hub with said disk-like rotating member in a rotational direction; and

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a damper mechanism being configured to absorb and to attenuate minute torsional vibration during idling of the vehicle, said damper mechanism operating only within an angular range from a zero torsional angle smaller than that within which said elastic connection mechanism operates said damper mechanism including an intermediate

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rotating member relatively rotatable to said hub within a limited angle, and a plate member extending in said rotational direction having main surfaces facing in the radial directions, said plate member being configured to be pushed by said hub in said rotational direction to slide against said intermediate rotating member to generate friction resistance during relative rotation of said hub and intermediate rotating member.

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11. The damper disk assembly according to claim 10, wherein said plate member is held by said intermediate rotating member such that said plate member is moveable in said rotational direction when said hub pushes said plate member.

12. The damper disk assembly according to claim 11, wherein said plate member is held by said intermediate rotating member such that said plate member is elastically deformed.

5 13. The damper disk assembly according to claim 12, wherein said intermediate rotating member is formed with a holding portion having a groove extending in said rotational direction and having opposite openings in said rotational direction, said plate member is disposed in said groove having a rotational direction length longer than that of said groove,

10 said hub has a pair of contact portions disposed on each rotational direction side of said holding portion in said rotational direction, said contact portions are configured to contact ends of said plate member.

14. The damper disk assembly according to claim 13, wherein a rotational direction length between said pair of contact portions is longer than a rotational direction length of said plate member, so that a rotational direction gap is secured at least between one of ends of said plate member and one of said contact portions.

15. A damper disk assembly according to claim 14, wherein said damper mechanism further includes an elastic member being configured to be compressed in said rotational direction when said hub and intermediate rotating member rotate relative to each other.

16. The damper disk assembly according to claim 10, wherein said plate member is held by said intermediate rotating member such that said plate member is elastically deformed.

5 17. The damper disk assembly according to claim 10, wherein said intermediate rotating member is formed with a holding portion having a groove extending in said rotational direction and having opposite openings in said rotational direction, said plate member is disposed in said groove having a rotational direction length longer than that of said groove,

10 said hub has a pair of contact portions disposed on each rotational direction side of said holding portion in said rotational direction, said contact portions are configured to contact ends of said plate member.

15 18. A damper disk assembly according to claim 10, wherein said damper mechanism further includes an elastic member being configured to be compressed in said rotational direction when said hub and intermediate rotating member rotate relative to each other.

19. The damper disk assembly according to claim 10, wherein said plate member includes a first member being made of a resin and having an arc shaped main body and supporting portions that extend radially inward from ends of said main body, and a second member being made of a metal that contacts said supporting portions.

20. The damper disk assembly according to claim 10, wherein said plate member includes a first layer and a second layer that encompasses said first layer.